



# The Balchem Beat

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The  
Balchem  
Beat

Issue 12 June/July 2023

# Editor's Note

Dear Reader,

We are excited to announce that we have redesigned our Balchem Beat newsletter! We have been sending this newsletter out every month for the past year, and we are thrilled to see that it has become increasingly popular.

In our redesign, we focused on making the newsletter more visually appealing and easier to read. We also wanted to make sure that the newsletter reflects the professionalism and quality that we put into our work.

We hope you enjoy the new look of the newsletter! We would love to hear your feedback. Please send your comments to [hnh-marketing@balchem.com](mailto:hnh-marketing@balchem.com)

Sincerely,  
**The Balchem Beat Editorial Team**

[balchem.com/human-nutrition-health](https://balchem.com/human-nutrition-health)  
[hnh-marketing@balchem.com](mailto:hnh-marketing@balchem.com)



**K2VITAL**<sup>®</sup>**OptiMSM**<sup>®</sup>

# Big Plans for Balchem's Minerals and Nutrients

Balchem Human Nutrition and Health and its recently acquired Kappa Bioscience and Bergstrom Nutrition are focusing on synergies between their portfolios and opportunities for innovation. **The editorial team of Balchem Beat asked Balchem SVP and General Manager Frederic Boned** about where Balchem is and where it's going.



**Frederic Boned,**  
Balchem Global  
Senior VP and  
General Manager  
HNH

**Balchem Beat:** The Kappa Bioscience and Bergstrom acquisitions were eye-catching moves. What was the thinking behind it?

**Frederic Boned:** It was a key part of our vision for the future. Kappa and Bergstrom give us two new products, K2VITAL<sup>®</sup> and OptiMSM<sup>®</sup>, for a portfolio with ingredients recognized as having consumer benefits. We're unlocking their potential by cross-selling, offering formulation ideas along with innovations from our existing portfolio. In the next five years, we'll be bringing out new science and new products. For example, we have eleven ongoing clinical studies to bring additional science on vitamin K2 to the market.

**Balchem Beat:** You have been highlighting vitamin K2. What more can you tell us about that?

**Frederic Boned:** More companies are offering vitamin K2 now, but typically K2 is not stable in formulations. K2VITAL<sup>®</sup> DELTA is Kappa's patented microencapsulated vitamin K2 preparation. In over 400 tests it has been shown to be optimally stable for mineral formulations. It's also dispersible in cold water, so it goes well with functional food formats like dairy and plant-based drinks, and smoothie powders. All this gives us a real advantage, so we're spotlighting how our K2VITAL<sup>®</sup> range can be

“For decades, nutrition has been underrepresented as a healthcare strategy. But now we’re seeing an increase in the science of nutrition and what it can bring to health and consumers.”

combined with the wider Balchem product portfolio to address a multitude of on-trend health segments around longevity and performance.



**Balchem Beat:** What is that wider product portfolio you mentioned?

**Frederic Boned:** We have our Albion® Minerals line of chelated and specialty minerals, which are covered in over 200 scientific studies, dozens of patents and nearly 80 completed clinical trials regarding several health benefits. Our organic mineral amino acid chelates allow reduced cost in use for CPGs, are highly bioavailable and have greater tolerability than inorganic minerals. They offer great possibilities for cardiovascular and bone health when combined with K2VITAL® DELTA.

We’re particularly proud of our ability to deliver on what we promise. Our K2VITAL® DELTA uses the only double-coated microencapsulation formulation supported by 3 years of stability data. For other nutrients, our VitaShure® product line employs lipid encapsulation technology to provide enhanced taste, superior stability and controlled delivery. In addition to our flagship microencapsulated choline, VitaCholine B90, we also offer encapsulated vitamin C, iron, dipotassium phosphate and caffeine to help you deliver enhanced consumer experiences for better health.

The Bergstrom acquisition also gives us a branded methylsulfonylmethane ingredient, OptiMSM®, known for its purity, safety, and consistency. It can be used in products for joint health, beauty from within and exercise recovery.

Finally there’s our VitaCholine®, which supports

normal lipid and homocysteine metabolism and liver function. It’s used in prenatal and infant products. The product contains choline, an essential building block of acetylcholine, which is a neurotransmitter that helps the brain send messages.



**Balchem Beat:** Where does the journey go from here?

**Frederic Boned:** With our recent acquisitions we have a very strong science pipeline and competencies. Over the next five years we’ll be focusing on growing consumer awareness around our nutrients, which is lacking globally, by communicating about the ingredients, explaining their benefits and showing the value of our portfolio.

We’ll also continue our international expansion, which the Kappa acquisition is part of. Balchem has a large exposure in the US, while Kappa Bioscience has a large exposure in the European market. These complement each other perfectly.

**Balchem Beat:** Where do you see the market going?”

**Frederic Boned:** The supplement and nutrition industry has a bright future. For decades, nutrition has been underrepresented as a healthcare strategy. But now we’re seeing an increase in the science of nutrition and what it can bring to health and consumers. Doctors are promoting the importance of nutrition in wellness and health, while social media helps them amplify their messages and reach out to a wider range of consumers globally. This trend is not going to slow down anytime soon.



# Summer Cookout Essentials

Summer is here! Which means it's time to fire-up the coals and enjoy delicious burgers and hot dogs. Whether you're enjoying a traditional burger, or plant-based alternatives, you may also be enjoying our MeatShure® encapsulated technology or our INhance™ Inclusions. Our line of MeatShure® encapsulated salts are designed to enhance the flavor of burgers, without the adverse effects salt has on the meat texture. Likewise, our INhance™ Inclusions are used to add visual and flavor into burgers, hotdogs and plant-based alternatives. A burger is nothing without the bun, and our BakeShure® technology is there to ensure your buns and rolls are fresh and ready to be eaten for every occasion. **So, next time you're together with friends enjoying a cookout, we'll be right there with you!**

**INhance™**  
inclusions

**MeatShure®** **BakeShure®**



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[hnh-marketing@balchem.com](mailto:hnh-marketing@balchem.com)



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We are excited to announce that our company has been recognized for our commitment to diversity hiring!

## Celebrating Diversity Hiring Recognition

We were awarded the "Diversity Hiring Champion" award by Circa, a leading job board for underrepresented groups.

This award is a testament to our hard work and dedication to creating a more diverse and inclusive workplace. We believe that diversity is essential for innovation and success, and we are committed to fostering a diverse and inclusive culture in which everyone feels welcomed, valued, and appreciated.

Thank you to our employees, our partners, and our customers for your support. We are proud to be a company that is committed to diversity hiring.





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OptiMSM®

# National Running Day

In the United States

# 50M

people consider  
themselves "runners"



whether a lifelong habit  
or a new hobby

Since 2020, 59% of active adults prefer to exercise outdoors to stay fit<sup>1</sup>. There are many reasons why people hit the pavement - from helping with mental health, to be in nature, explore new places, or just as main workout. Are you part of this team?

After any type of run, it's important for your body to recover properly - and your diet plays an important role in aiding your recovery. Methylsulfonylmethane (MSM) is a source of the nutrient sulfur, a key mineral in your diet that can help support healthy joints and aids in the defense against oxidative stress<sup>2\*</sup>. OptiMSM® is the leading brand of MSM, that's safe<sup>3</sup>, bioavailable<sup>4</sup>, and produced to the highest quality standards in the industry. Whether you are running indoors or outdoors, running places stress on your joints, specifically the

cartilage and connective tissue around them<sup>5\*</sup>. As part of your nutrition plan, OptiMSM® can help you recover from that big run<sup>6\*</sup> by providing critical sulfur nutrition to help maintain your joints and support your body's antioxidant defenses<sup>2\*</sup> so you feel ready to hit the track next time.

### Supplementing with MSM has been shown to:

- Reduce oxidative stress after running<sup>7\*</sup>
- Reduce post-running muscle damage<sup>7,8\*</sup>
- Improve the antioxidant response after the run<sup>7,8\*</sup>
- Provide benefits\* to new<sup>8</sup> and experienced<sup>7</sup> runners and athletes alike!

OptiMSM® will help you get on the right path to seeing better performance the next time you lace up for the treadmill or trail<sup>2\*</sup>.

### Happy Running!

Sources:

1. 126 Running Statistics You Need to Know in 2023 | [Livestrong](#)
2. Food and Nutrition Board, Institute of Medicine, 2005;
3. Butawan M, et al., *Nutrients* 2017; 9(3): 290.
4. Bloomer RJ, et al., *J Nutr Food Sci* 2019; 9(1).
5. Eckstein F, et al., *J Anat* 2006; 208(4): 491-512.
6. Kalman D, et al., *FASEB J* 2013; 27: 1076.7 (abstr).
7. Barmaki S, et al., *J Sports Med Phys Fitness* 2012; 52: 170-174.
8. Nakhostin-Roohi B, et al., *J Pharm Pharmacol* 2011; 63: 1290-1294.

\*These statements have not been evaluated by the Federal Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

[balchem.com/human-nutrition-health](http://balchem.com/human-nutrition-health)  
[hnh-marketing@balchem.com](mailto:hnh-marketing@balchem.com)



**K2VITAL®**

# InterVitaminK Study Published in BMJ Open

Research continues to demonstrate a link between Vitamin K2 and maintaining heart health, and a new clinical trial aims to provide additional evidence showing the benefits of this important nutrient. The study protocol for the [InterVitaminK trial](#) is now published in [BMJ Open](#), and marks an important milestone into this critical research question.

This randomized, double-blind, placebo-controlled trial investigates whether 3 years of vitamin K2 supplementation can improve cardiovascular, metabolic and bone health in middle-aged to older adults. **With a total sample size of 450 men and women aged 52–82 years with detectable coronary artery calcification (CAC)**, but without manifest coronary artery disease (CVD), participants will receive daily Vitamin K2 MK-7 (333 µg/day as K2VITAL® DELTA, supplied by Kappa Bioscience) or placebo tablets for 3 years. The primary endpoint is difference in 3-year progression of CAC, but researchers will also evaluate changes in bone mineral density (BMD), pulmonary function and biomarkers of insulin resistance.

**The investigators hypothesize that vitamin K2 supplementation could reduce the progression of CAC by up to 15% compared to placebo, which would be considered as a clinically relevant difference.**

The study is performed with our long-term collaborators at the Center for Clinical Research and Prevention, Copenhagen University Hospital - Bispebjerg and Frederiksberg Hospital in Denmark with Prof. Allan Linneberg in the lead.

## According to the authors, some of the major strengths of this study are:

- The population-based, randomized, double-blind, placebo-controlled design
- The long intervention period (3 years)
- The large expected sample size (n=450 men and women)
- The trial will serve as proof of concept of whether vitamin K2 (MK-7) supplementation may serve as a measure for the prevention of vascular calcification, an important factor in overall heart health

Findings of the InterVitaminK study may contribute to new dietary recommendations for the intake of vitamin K. From a public health perspective, there is an urgent need for simple and feasible interventions to find novel connections between diet and heart health. Currently, 300 out of 450 participants are enrolled, and trial results are expected by end of 2026.

The team at Balchem/Kappa is committed to supporting important research on Vitamin K2 and health, and is just one of many studies ongoing on our clinical pipeline.

Click here to  
learn more  
about our  
work on  
Vitamin K2  
and health.



# Focus on Supplements to Address Challenges of Stressful Times

## Deficiencies

Nutrition Business Journal's Condition-Specific June Issue highlights areas where supplements can play a key role.

Mood and mental health supplement sales and growth, 2017–2025e



Brain health supplement sales and growth, 2017–2025e



- New pharmaceutical drug therapies to fight obesity by helping to control appetite could lead to **nutritional deficits that are an opportunity for supplements to address due to reduced-calorie diets**
- During the pandemic, sleep supplement sales soared to \$1.2 billion, and growth slowed in 2022. However, a sleep-deprived and stressed-out nation is still looking for solutions. **Consumers want quality but also to understand the scientific support for premium supplement products.** A challenge for supplements is that consumers look to get an immediate effect (like pharmaceutical products) so it's important to manage expectations.

- There is a mental health crisis among teens with causes linked to things such as social media and smart phone usage. Mood and mental health are high priority conditions and the link to diet may be overlooked. **Deficiencies in vitamins D and B12 and magnesium in teens, along with low-fiber are important concerns when it comes to teen stress and anxiety.** While there are many products targeted to younger kids, there is a lack of stress supplements specifically for teens.

\*Source: Nutrition Business Journal Condition Specific Issue June 2023



## Events

SEE YOU  
THERE

**IFT First Annual Event  
(7/16-7/19)**  
Chicago, IL

**NBJ Summit  
(7/25-7/27)**  
Ranch Palos Verde, CA




## Webinar

WATCH THE  
REPLAYS

**Gaining a  
Mental Edge**  
How VitaCholine® Activates the  
Mind and Propels the Body

 [Watch the Replay](#)

**Spring into Action  
with OptiMSM®**  
Maintaining Mobility and Joint  
Health for All Ages

 [Watch On-Demand](#)